

CLAIMS

WHAT IS CLAIMED IS:

1. A method for developing software, the method comprising:
- defining a focus area which represents:
- 5 a business process to be performed by the software under development; and
- one or more first participants in said business process, at least one of said first participants having a plurality of roles;
- decomposing said focus area into one or more sub-focus
- 10 areas, each of said sub-focus areas including:
- a subset of said business process; and
- one or more second participants in said subset of said business process, each of said second participants having only a single one of said plurality of roles;
- 15 creating a use case based on a first one of said one or more sub-focus areas, said use case comprising an instance of usage, by a one of said second participants, of a first subset associated with said first one of said sub-focus areas; and
- creating source code to perform acts performed in the course
- 20 of providing said first subset of said business process.
2. The method of claim 1, wherein said decomposing step comprises:
- decomposing said first focus area into an intermediate-level focus area which includes:
- 25 a subset of said business process; and
- one or more third participants, at least one or more of said third participants having more than one of said plurality of roles; and
- further decomposing said intermediate-level focus area to produce a second one of said sub-focus areas.

3. The method of claim 1, wherein said focus area is represented as a specification including a plurality of fields, and wherein said method further comprises:

5 propagating one or more of said plurality of fields to each of said sub-focus areas; and

 creating, for each of said sub-focus areas, a set of fields based on the one or more propagated fields.

10 4. The method of claim 3, wherein said plurality of fields comprises a business background field, and wherein said propagating act comprises propagating said business background field to each of said sub-focus areas.

15 5. The method of claim 3, wherein said plurality of fields comprises an assumptions field which comprises a set of assumptions, and wherein said propagating act comprises propagating said assumptions field to each of said sub-focus areas.

20 6. The method of claim 5, wherein said act of propagating said assumptions field comprises propagating fewer than all of the assumptions in said set of assumptions.

25 7. The method of claim 3, wherein said plurality of fields comprises a functional requirements field, and wherein said propagating act comprises propagating said functional requirements field to each of said sub-focus areas.

 8. The method of claim 3, wherein said plurality of fields comprises a business goals field, and wherein said propagating act comprises propagating said business goals field to each of said sub-focus areas.

30 9. The method of claim 8, wherein said act of propagating said business goals field comprises propagating a sub-goal field.

10. The method of claim 3, wherein said plurality of fields comprises a business goals field, and wherein at least one of said sub-focus areas is an implementation use case, and wherein said propagating act comprises propagating
5 said business goals field to each of said one or more focus areas exclusive of said implementation use case.

11. The method of claim 1, further comprising:
specifying a temporal relationship among at least two of said
10 one or more focus areas.

12. A method for providing computer-assisted software engineering comprising:
receiving first information indicative of a first focus area, said
15 first focus area representing:
a set of first requirements for software to be
developed; and
a set of first participants in the use of said software;
receiving a division of said set of first requirements which
20 indicates a plurality of separate first aspects of said set of first requirement;
displaying said set of first requirements and said set of first participants;
receiving second information indicative of a second focus area, said second focus area including:
25 a set of second requirements for a one of said first aspects; and
a set of second participants who participate in a use of said one of said first aspects, said second set of participants being based on said first set of participants;
30 receiving a division of said set of second requirements which indicates a plurality of separate second aspects of said set of second requirements;

displaying said set of second requirements and said set of
second participants;

receiving third information which includes:

a set of third requirements for a one of said second

5 aspects; and

a set of third participants who participate in a use of
said one of said second aspects, each of said third participants having only a single
role with respect to said one of said second aspects; and

generating a use case based on said third information, said use
10 case defining an instance of the operation of said software by a one of said third
participants participating in said one of said second aspects.

13. The method of claim 12, further comprising:

providing a template which comprises a requirements field
15 and a participants field;

and wherein said act of receiving first information comprises:

storing said set of first requirements in said requirements
field; and

storing said set of first participants in said participants field;
20 and wherein said act of receiving second information comprises:

storing said set of second requirements in said requirements
field; and

storing said set of second participants in said participants
field;

25 and wherein said act of receiving third information comprises:

storing said set of third requirements in said requirements
field; and

storing said set of third participants in said participants field.

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14. The method of claim 12, wherein said method further comprises:

providing a template which comprises a plurality of fields
which represent a use case;

and wherein said generating act comprises:

displaying said template with at least some of said plurality of
5 fields containing information which is based on said third information.

15. The method of claim 12, wherein:

said first information further comprises a set of first
assumptions about said software to be developed;

10 said second information further comprises a set of second
assumptions about said first aspect; and

said third information further comprises a set of third
assumptions about said second aspect.

15 16. The method of claim 12, wherein:

said first information further comprises a set of first business
goals relating to said software to be developed;

said second information further comprises a set of second
business goals relating to said first aspect; and

20 said third information further comprises a set of third business
goals relating to said second aspect.

17. The method of claim 12, wherein:

said first information further comprises first business
25 background information relating to said software to be developed;

said second information further comprises second business
background information relating to said first aspect; and

said third information further comprises third business
background information relating to said second aspect.

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18. A computer-readable medium encoded with computer-executable instructions which instruct a computing device to perform a method, the method comprising:

- receiving first information indicative of a first focus area, said
5 first focus area representing:
a set of first requirements for software to be
developed; and
a set of first participants in the use of said software;
receiving a division of said set of first requirements which
10 indicates a plurality of separate first aspects of said set of first requirement;
displaying said set of first requirements and said set of first
participants;
receiving second information indicative of a second focus
area, said second focus area including:
15 a set of second requirements for a one of said first
aspects; and
a set of second participants who participate in a use of
said one of said first aspects, said second set of participants being based on said first
set of participants;
20 receiving a division of said set of second requirements which
indicates a plurality of separate second aspects of said set of second requirements;
displaying said set of second requirements and said set of
second participants;
receiving third information which includes:
25 a set of third requirements for a one of said second
aspects; and
a set of third participants who participate in a use of
said one of said second aspects, each of said third participants having only a single
role with respect to said one of said second aspects; and

generating a use case based on said third information, said use case defining an instance of the operation of said software by a one of said third participants participating in said one of said second aspects.

5 19. The computer-readable medium of claim 18 wherein the method further comprises:

 providing a template which comprises a requirements field and a participants field;

and wherein said act of receiving first information comprises:

10 storing said set of first requirements in said requirements field; and

 storing said set of first participants in said participants field; and wherein said act of receiving second information comprises:

15 storing said set of second requirements in said requirements field; and

 storing said set of second participants in said participants field;

and wherein said act of receiving third information comprises:

20 storing said set of third requirements in said requirements field; and

 storing said set of third participants in said participants field.

 20. The computer-readable medium of claim 18, wherein the method further comprises:

25 providing a template which comprises a plurality of fields which represent a use case;

and wherein said generating act comprises:

 displaying said template with at least some of said plurality of fields containing information which is based on said third information.

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21. The computer-readable medium of claim 18, wherein:

said first information further comprises a set of first assumptions about said software to be developed;

said second information further comprises a set of second assumptions about said first aspect; and

5 said third information further comprises a set of third assumptions about said second aspect.

22. The computer-readable medium of claim 18, wherein:

10 said first information further comprises a set of first business goals relating to said software to be developed;

 said second information further comprises a set of second business goals relating to said first aspect; and

 said third information further comprises a set of third business goals relating to said second aspect.

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23. The computer-readable medium of claim 18, wherein:

 said first information further comprises first business background information relating to said software to be developed;

20 said second information further comprises second business background information relating to said first aspect; and

 said third information further comprises third business background information relating to said second aspect.